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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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09/496,516 02/02/2000 Peter F. Zalud SAR 12165 6354

26581 7590 09/30/2003

RATNERPRESTIA
P.O. BOX 980
VALLEY FORGE, PA 19482-0980

EXAMINER

AHN, SAM K

ART UNIT

PAPER NUMBER

2634

DATE MAILED: 09/30/2003

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Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/496,516

Applicant(s)

ZALUD ET AL.

Examiner

Sam K Ahn

Art Unit

2634

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on amendment, received on 7/10/03.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 15-24 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 19-24 is/are allowed.
- 6) ☒ Claim(s) 15-18 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 02 February 2000 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Response to Arguments

1. Applicant's arguments with respect to claims 15-24 have been considered but are moot in view of the new ground(s) of rejection.

Drawings

2. The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, all the essential elements claimed must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

Figure 9 seems to illustrate the overall function of this application. However, it does not illustrate the essential elements, such as receiving means, data means and signal generating means within the integrator (505), receiving means and clock synchronization means within the discriminator (510).

A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claims 15-18 are rejected under 35 U.S.C. 102(b) as being anticipated by Giles et al. ('064).

Regarding claim 15, Giles discloses a data demodulating apparatus comprising receiving means (14 and 15 in Fig.1) receiving a first signal (LS1 shown in Fig.2) including a first data value (High) and a second data value (Low) where the resultant signal received by Up-down counter is /CS signal. The up-down counter increases a count value when the first signal includes CS signal or (High) and decreases a count value when the first signal includes /CS signal or (Low). Data means and signal generating means (17) produces a third data value when the count value is equal to a first threshold value (reaching the S-state, see Fig.2) and a fourth data value when the count value is equal to a second threshold value (reaching the M-state, see Fig.2). The output signal is illustrated in figure 2 in EDO line. As S-state is reached, the EDO goes to a different state (to a low state) and changes its state when M-state is reached (to a high state). (note col.3, line 61 – col.4, line 59)

The limitation of “equal to or greater (or less) than” is interpreted as meeting either ‘equal to’ OR ‘greater than’ where Giles teaches the limitation of being “equal to” a threshold. It is not interpreted as meeting both conditions.

Regarding claim 16, Giles teaches all subject matter claimed, as applied to claim 15. Giles further teaches all elements including the counter means, the data means and the signal generating means comprised in a filter. (see 16 in fig.1) and (note col.4, lines 10-59)

Regarding claims 17 and 18, Giles teaches all subject matter claimed, as applied to claim 15. Giles further teaches the counter means including means for preventing the counter from exceeding a maximum and minimum values (S-state and M-state). (note col.4, lines 39-59)

Allowable Subject Matter

4. Claims 19-24 are allowable.

The following is a statement of reasons for the indication of allowable subject matter: Prior art does not teach a discriminator comprising a receiving means, counter means and clock synchronization means, as recited in claim 19. Prior arts, Sekigawa in view of Nimishakavi, do not teach all the limitation recited, which in previously office action were used in a rejection. Prior art does not teach the limitation where the counter increases when first data value in a first signal is received and reset count value upon receiving a second data value. And further, a clock synchronization signal is produced when the count value in the counter is greater than or equal to a first threshold value.

Conclusion

5. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

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Carlow et al. teach a digital frequency shift keying receiver comprising an up-down counter.

Welch et al. teach digital communication system comprising a counter and clock synchronization.

Cox et al. teach a counter producing a synchronized clock signal.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to **Sam Ahn** whose telephone number is **(703) 305-0754**.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, **Stephen Chin**, can be reached at **(703) 305-4714**.

Any response to this action should be mailed to:

Commissioner of Patents and Trademarks

P.O. Box 1450

Alexandria, VA 22313-1450

or faxed to:

(703) 872-9306

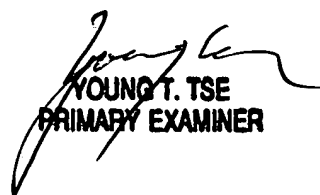
Hand-delivered responses should be brought to Crystal Park II, 2121 Crystal Drive, Arlington, VA., Sixth Floor (Receptionist).

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Technology Center 2600 Customer Service Office whose telephone number is (703) 306-0377.

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Sam K. Ahn
9/16/03


YOUNG T. TSE
PRIMARY EXAMINER